

REMARKS

Claims 3-7, 10-15 and 17-20 are pending in the present application. Claims 7 and 11 are independent. Reconsideration of this application, in view of the following remarks, is respectfully requested.

Rejection Under 35 U.S.C. § 102

Claims 3-7, 10-15 and 17-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Rourke et al. (U.S. Patent No. 5,995,721). This rejection is respectfully traversed.

The present invention is directed to a method of processing digital print files in a network system and a printer for printing digital print files. Independent claim 7 is directed to the method and recites a combination of steps including “distributing at least the metadata of each received print file to all of said plurality of printers” and “each of said plurality of printers making each print file available for selection and printing, through respective local operating units of said plurality of printers, but not printing any print files without an explicit command from the printer.”

Independent claim 11 is directed to the printer and recites a combination of elements including “a control unit.” The control unit, which is an element of the printer, includes a combination of elements including “a maintaining mechanism,” “an analyzing mechanism,” a checking mechanism” and “an advising mechanism.”

Applicants respectfully submit that the Rourke et al. reference relied on by the Examiner fails to teach or suggest the present invention as recited in independent claims 7 and 11.

In particular, Rourke et al. is directed to a print system consisting of a print server 25 and a plurality of printers 12-1 through 12-N connected thereto. The printers are connected to a respective one of a plurality of print queues 42-1 through 42-N. The print queues are located in the server 25 (see Figure 2 of Rourke et al.) and specify the capabilities of the connected printer.

In Rourke et al., print jobs that are generated in the workstations arrive at the server and are analysed at the server for required printer capabilities. Then a print queue that fits the required capabilities is selected for printing the job. If no single queue can provide all of the required capabilities, the job may be split into parts that can be printed by a respective print queue (printer). The job parts are then individually placed in print queues that can print them.

An essential feature of the Rourke et al. disclosure is that the job allocation is done centrally by the server, and print jobs or parts of print jobs are each allocated to a single print queue (printer) at the server level.

This concept differs from the presently claimed invention, because the inventive concept is essentially decentralized. All steps are performed at the local user interfaces of the printers, the server role being merely supportive. Specifically, as discloses at pages 27 and 28 of the present specification, jobs are submitted to all printers in the system, or at least are made selectable at all printers by sending the job particulars (metadata) to all printers. Then, the system waits for (an operator at the user interface of) any one of the printers to claim the print job. In the meantime, the jobs are not printed but are selectable or even available at the printer level.

In contrast, in Rourke et al., jobs may also be buffered without printing, as the Examiner points out with reference to the end of column 9 of Rourke et al.; however, the buffering occurs at the server level and not at the printer level. Therefore, the jobs are not available at the printer level at all of the printers in the system as in the presently claimed invention.

In the present invention, claiming a print job is done by an operator at the local user interface of a printer, by selecting a job from the list of available jobs and then giving a print command (hitting the START button). If the printer claiming the job does not have the print data of the job, i.e. it only has the metadata of the job, it fetches the data when a print command is given at its user interface.

As disclosed on pages 35 and 36 of the present specification, if a print job cannot be printed by a particular printer in accordance with the associated job settings, then, at the moment of selection, by the operator at the user interface, the operator is advised of the non-compliance and of any other printers that might be capable of completing the job properly. The operator can then decide to go to another printer as advised or change the job settings, so that the print job can be printed by the current printer.

Clearly, the complete process described above is performed decentrally, at one printer local user interface. There is no central authority (server) checking capabilities and selecting particular printers in accordance with the capabilities as in the Rourke et al. device. There is a central server, the UPS as it is called in the present specification; however, the task of the UPS is limited to data exchange.

In view of the above, Applicants respectfully submit that the Rourke reference fails to anticipate independent claims 7 and 11 of the present invention. However, the Examiners comments in the Office Action will be particularly addressed below.

In the Examiner's Office Action, the Examiner has taken the position that Rourke et al. discloses "distributing at least the metadata of each received print file to all of said plurality of printers" in figure 12 and column 12, line 62 to column 13, line 10. It is first noted that figure 12 is a schematic diagram that is directed to one example of a print job that is split between several printers. As can be seen from figure 12, there are document processing units 1 through N in the system. However, column 12, line 62 to column 13, line 10 discusses a particular print job as being distributed only to document processing units 1 and 2. Specifically, the color printer (unit 1) prints the color portion of the print job and the black and white printer (unit 2) prints the black and white portion of the print job.

It should also be noted that the decision as to which printers receive the print job is determined in Rourke et al. at the server level. It is not the individual printers that make the decision as in the presently claimed invention.

In view of the above, all of the document processing units (printers) of Rourke et al. do not receive the print jobs. Only the printers that are capable of handling the print job receive the print job. This is different from the presently claimed invention, which recites "distributing at least the metadata of each received print file to all of said plurality of printers." Therefore, Rourke et al. fails to anticipate independent claim 7 of the present invention.

In the Examiner's Office Action, the Examiner also has taken the position that "each of said plurality of printers making each print file available for selection and printing, through respective local operating units of said plurality of printers" at column 9, line 66 to column 10, line 9. However, this portion of Rourke et al. is also discussing what happens at the server level. This is clear since queues are located at the server level. In view of this, Rourke et al. fails to disclose "each" printer making "each" print file available through respective local operating units as in the presently claimed invention. Rourke et al. fails to anticipate independent claim 7 of the present invention for this additional reason.

With regard to independent claim 11, Applicants submit that Rourke et al. fails to disclose each and every element of this claim because this claim is directed to a printer and not a system of several printers. The printer recited in claim 11 includes a control unit (which includes a maintaining mechanism, an analyzing mechanism, a checking mechanism and an advising mechanism). In addition, the control unit includes a print file selection mechanism and a print file releasing mechanism. It is believed that the Examiner has taken the position that various functions that are performed by the server 25 of Rourke et al. are elements of the printer. However, as can be understood from Figure 2 of Rourke et al., the server 25 is a centrally located server that is common to all of the printers in the system. The individual printers do not include the server and therefore do not include a control unit as recited in independent claim 11.

For example, in the Examiner's Office Action, the Examiner has taken the position that Rourke et al. discloses the recitation "a maintaining mechanism for maintaining information on capabilities and status of connected printers" in figure 7 and column 9, lines 9-13. However, this

portion of Rourke et al. describes the screen of one of the workstations 15-N (see Figure 1). It would be necessary for Rourke et al. to disclose one of the printers 12-1 through 12-N to include information on the status of other printers in the system in order to meet this recitation in claim 11. Since Rourke et al. is silent with regard to this element of claim 11, Applicants submit that Rourke et al. fails to anticipate independent claim 1 of the present invention for at least this reason.

With regard to dependent claims 3-6, 10, 12-15 and 17-20, Applicants respectfully submit that these claims are allowable due to their respective dependence upon independent claims 1 and 11, as well as due to the additional recitations in these claims.

In view of the above amendments and remarks, Applicants respectfully submit that claims 3-7, 10-15 and 17-20 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejection under 35 U.S.C. § 102 are respectfully requested.

CONCLUSION

For the foregoing reasons and in view of the above clarifying amendments, Applicants respectfully request the Examiner to reconsider and withdraw all of the rejections of record, and earnestly solicit an early issuance of a Notice of Allowance.

Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Paul C. Lewis (Registration No.

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43,368) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: September 8, 2006

Respectfully submitted,

By 

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